

REMARKS / ARGUMENTS

Status of Claims

Claims 1-46 are pending in the application and stand rejected. Of the pending claims, Applicant has canceled Claims 20, 25-26, 29-30, and 35-37, and has amended Claims 13, 24, 27, 28, and 34, leaving Claims 1-19, 21-24, 27-28, 31-34 and 38-46 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §102(b)

Claims 1-9 and 13-21 stand rejected under 35 U.S.C. §102(b) as being anticipated by Engel et al. (U.S. Patent No. 5,600,527, hereinafter Engel). Applicant traverses this rejection for the following reasons.

Engel discloses a circuit breaker 1 connected to a power system 3. The circuit breaker 1 has current transformers 7A, B, C, N and G, potential transformers 9A, B and C, and a ranging circuit 11. The circuit breaker 1 is used for protection and capture of the waveforms in the power system 3. (Col. 3, lines 32-41). Notably absent from Engel is any disclosure of a ***combined sensor shell for housing current and voltage sensors, or a configuration plug for configuring voltage sensors in either a wye or a delta configuration.***

Applicant respectfully submits that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, ***in a single prior art reference.***” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, “[t]he identical invention must be shown in as complete detail as is contained in the *** claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements

“arranged as in the claim.” Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. Titanium Metals Corp. v. Banner, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

In comparing Engel with the instant invention, Applicant submits that Claim 1 and amended Claim 13 include the elements of *a combined sensor shell*, and a current sensor and a first voltage sensor *located in* the combined sensor shell. Applicant submits that Engel does not disclose these elements, and respectfully submits that the Examiner has not sufficiently explained how Engel does disclose these elements.

In alleging anticipation, the Examiner looks to Figure 1, items 7A, 7B, 7C, to find the combined current and voltage sensors, to Figure 1, item 11, to find the combined sensor shell, and to Engel generally to find a current sensor located in the combined sensor shell. (Paper 3, page 2). Contrary to the Examiner’s allegation, Applicant finds Figure 1, items 7A, 7B and 7C, to disclose current transformers (col. 3, lines 37-38), Figure 1, item 11, to disclose a ranging circuit that converts the current and voltage signals to a suitable range for conversion (col. 3, lines 39-41), and finds Engel generally to be absent the disclosure of a voltage and a current sensor *located in a combined sensor shell*.

In viewing Figure 1 of Engel, which the Examiner relies on for anticipation (paper 3, page 2), Applicant finds a ranging circuit 11, current transformers 7A, 7B, 7C, 7N and 7G, and potential transformers 9A, 9B and 9C, all to be separate from one another, and no disclosure of a combined sensor shell for housing a current and a voltage sensor, as claimed in the instant invention.

Dependent claims inherit all of the limitations of the respective parent claim.

In regard to Claims 2-9 and 14-21, the Examiner makes a broad sweeping statement that Engel discloses the claimed limitations, including a configuration plug, without specifically identifying where in Engel all of the limitations may be found. Without clear disclosure of each and every element of the claimed invention, such a

conclusory statement cannot be proper grounds for anticipation. For an anticipation rejection to be proper, the Examiner must show with specificity each and every element of the claimed invention, as arranged in the claimed invention, in a single prior art reference. Here, the Examiner has not met this burden and therefore cannot properly reject the instant invention on grounds of anticipation.

In view of the amendment and foregoing remarks, Applicant submits that Engel does not disclose each and every element of the claimed invention and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw all rejections under 35 U.S.C. §102(b).

Rejections Under 35 U.S.C. §103(a)

Claims 1-46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Matsko et al. (U.S. Patent No. 5,936,817, hereinafter Matsko) in combination with Peterson et al. (U.S. Patent No. 5,420,799, hereinafter Peterson). The Examiner comments that Matsko discloses the claimed invention at Figure 2, that Matsko does not disclose the utilization of a technique for a voltage divider, and that Peterson cures this deficiency. (Paper 3, page 3). The Examiner alleges that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Matsko by utilizing Peterson for the purpose of reducing energy consumption.

Applicant traverses the Examiner's rejections for the following reasons.

As referenced, Matsko discloses an electronic trip unit 13, a circuit breaker 12, current transformers 16A, 16B, 16C and 16N, and potential transformers 26A, 26B and 26C, for selectively enabling and disabling a close actuator mechanism 10. (Figure 2, col. 3, lines 9-58, and the title).

As referenced, Peterson discloses a resistor network (R22, R23, R24, R26, R27 and R28) on a printed circuit board (PCBA) that is part of a backpack unit (BPU) attached externally to a circuit breaker (CB). (Figures 4A and 14A).

As referenced, Applicant submits that Matsko and Peterson are absent the disclosure of a combined sensor shell for housing a current and a voltage sensor that is used in a circuit breaker, or a configuration plug for configuring the voltage sensors in either a wye or a delta configuration.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Regarding Claims 1, 13, 24, 34, 38, 41 and 44, Applicant submits that the independent claims include the elements of a combined sensor shell for housing a current sensor and a voltage sensor for use in a circuit breaker, or a configuration plug for configuring voltage sensors in either a wye or a delta configuration in a circuit breaker.

Dependent claims inherit all of the limitations of the respective parent claim.

Regarding Matsko, the Examiner looks to Figure 2 for disclosure of the claimed invention. In comparing Figure 2 of Matsko with Figure 1 of Engel, discussed previously in relation to the 35 U.S.C. §102(b) rejections, Applicant finds many similarities (phase conductors, current transformers and potential transformers in signal communication with an electronic circuit, for example), and for at least the reasons argued above regarding the §102(b) rejections, Applicant respectfully submits that Matsko is fatally deficient in its disclosure of the claimed invention. Specifically and in respectful disagreement with the Examiner, Applicant submits that Matsko is absent any teaching of a combined sensor shell for housing current and voltage sensors, or a configuration plug for configuring voltage sensors in either a wye or a delta configuration, as suggested by the Examiner, and that the Examiner has not stated with any degree of specificity where in Matsko such elements may be found.

Regarding Peterson, the Examiner looks to cure the deficiency of Matsko by looking to Figure 14A of Peterson for a voltage divider. In comparing Figure 14A of Peterson with the claimed invention, Applicant finds no disclosure of a current sensor and a voltage sensor located in a combined sensor shell where the current and voltage sensors are each proximate a load strap. While Peterson does disclose current sensors CT and voltage sensing resistors R223, R23, R24, R26, R27 and R28 (Figure 14A), the disclosure of such is in relation to a backpack unit BPU at a load cable (Figure 4A), and not in relation to a load strap in a circuit breaker, as claimed in the instant invention. Applicant respectfully submits that the backpack unit of Peterson is a substantially different invention than a combined sensor shell unit in a circuit breaker having a current sensor in combination with a voltage sensor disposed proximate a load strap in the circuit breaker.

Regarding Claims 3, 15, 24, 34, 38, 41 and 44, specifically, Applicant finds no suggestion, teaching, or motivation in Matsko or Peterson, either singly or in combination, for providing a configuration plug for the purpose of configuring the voltage sensors as a wye or a delta configuration, and the Examiner has not provided any specific explanation as to where in the references such elements may be found.

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

In view of the amendments to the claims, the additional remarks presented herein, and the similar discussion earlier regarding the rejections under 35 U.S.C. §102(b), Applicant respectfully submits that the references fail to teach or suggest each and every element of the claimed invention and disclose a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, and respectfully request that the Examiner reconsider and withdraw these rejections.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 06-1130.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above identified Deposit Account.

Respectfully submitted,

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